

Reproductive Toxicology

Volume 5, Number 1

1991

CONTENTS

Editorial

- A.R. Scialli** 1 Congratulations to Us

Reproductive Toxicology Review

- N.A. Brown** 3 Reproductive and Developmental Toxicity of Styrene

Original Contributions

- G.K. Lemasters** 31 Fertility of Workers Chronically Exposed to Chemically Contaminated Sewer Wastes
H. Zenick
V. Hertzberg
K. Hansen
S. Clark
- G.R. Klinefelter** 39 The Method of Sperm Collection Significantly Influences Sperm Motion Parameters following Ethane Dimethanesulphonate Administration in the Rat
L.E. Gray, Jr.
J.D. Suarez
- M. Piasek** 45 Reversibility of the Effects of Lead on the Reproductive Performance of Female Rats
K. Kostial
- B.O. Nilsson** 53 Particle-Induced X-ray Emission (PIXE) for Detection of Lead in Mouse Blastocysts
U. Lindh
T. Sunde
M. Wide
- G. Laschinski** 57 Cytotoxicity Test Using Blastocyst-Derived Euploid Embryonal Stem Cells: A New Approach to in Vitro Teratogenesis Screening
R. Vogel
H. Spielmann
- J. Williams** 65 Vaginal Cyclicity, Sexual Receptivity, and Eating Behavior of the Female Rat following Treatment with Chlordecone
L. Uphouse
- E.F. Pydyn** 73 Effect of Cyclophosphamide on Mouse Oocyte in Vitro Fertilization and Cleavage: Recovery
K.M. Ataya
- M. Levy** 79 Fetal Outcome following Intrauterine Amantadine Exposure
A. Pastuszak
G. Koren

Short Communication

- E. Robert** 83 Ovulation Induction and Neural Tube Defects: A Registry Study
E. Pradat
B. Laumon

Book Reviews

- | | | |
|---------------|----|---|
| A. Lione | 85 | <i>Handbook of Ayurvedic Medicinal Plants</i> by L.D. Kapoor |
| A. R. Scialli | 85 | <i>In Vitro Methods in Developmental Toxicology: Use in Refining Mechanisms and Risk Parameters</i> by G.L. Kimmel and D.M. Kochhar |

Volume 5, Number 2

1991

CONTENTS

Editorial

- | | | |
|-----------------|----|---|
| J.L. Benkendorf | 87 | Prenatal Substance Abuse: A Ubiquitous Cry for Help |
|-----------------|----|---|

Reproductive Toxicology Reviews

- | | | |
|------------------------------------|----|---|
| J.W. Scanlon | 89 | The Neuroteratology of Cocaine: Background, Theory, and Clinical Implications |
| M.A. Plessinger
J.R. Woods, Jr. | 99 | The Cardiovascular Effects of Cocaine Use in Pregnancy |

Original Contributions

- | | | |
|---|-----|--|
| D.P. Evenson
L.K. Jost
R.K. Baer
T.W. Turner
S.M. Schrader | 115 | Individuality of DNA Denaturation Patterns in Human Sperm as Measured by the Sperm Chromatin Structure Assay |
| C.L. Hughes, Jr.
R.S. Kaldas
A.S. Weisinger
C.E. McCants
K.B. Basham | 127 | Acute and Subacute Effects of Naturally Occurring Estrogens on Luteinizing Hormone Secretion in the Ovariectomized Rat: Part 1 |
| C.L. Hughes, Jr.
M.M. Chakinala
S.G. Reece
R.N. Miller
D.W. Schomberg, Jr.
K.B. Basham | 133 | Acute and Subacute Effects of Naturally Occurring Estrogens on Luteinizing Hormone Secretion in the Ovariectomized Rat: Part 2 |
| E.M. Martinez
W.J. Swartz | 139 | Effects of Methoxychlor on the Reproductive System of the Adult Female Mouse; 1: Gross and Histologic Observations |
| R. Santti
R.R. Newbold
J.A. McLachlan | 149 | Androgen Metabolism in Control and Neonatally Estrogenized Male Mice |
| D.E. Leonhardt
L.W. Coleman
W.S. Bradshaw | 157 | Perinatal Toxicity of Ethylene Glycol Dimethyl Ether in the Rat |

Book Reviews

- A.R. Scialli** 163 *V International Congress of Toxicology. Basic Science in Toxicology*, edited by G.M. Volans, F.M. Sullivan, and P. Turner, and *Maternal-Fetal Toxicology, A Clinicians' Guide* edited by G. Koren
- 167 Announcement

Volume 5, Number 3

1991

CONTENTS

Editorial

- W. Pease** 169 When Scientists Become Policy Makers: Shaping Hazard Identification under Proposition 65
- D.R. Mattison** 175 In Reply

Reproductive Toxicology Review

- S. Kaneko** 179 Antiepileptic Drug Therapy and Reproductive Consequences: Functional and Morphologic Effects

Original Contributions

- B. Varga** 199 Toxic Effects of Cadmium on LHRH-Induced LH Release and
K. Paksy Ovulation in Rats
- E. Ernst** 205 Ultrastructural Demonstration of Mercury in Sertoli and Leydig
B. Møller-Madsen Cells of the Rat following Methyl Mercuric Chloride or Mercuric
G. Danscher Chloride Treatment
- U.S. Singh** 211 Lead-Induced Fetal Nephrotoxicity in Iron-Deficient Rats
D.K. Saxena
C. Singh
R.C. Murthy
S.V. Chandra

*Proceedings of the Meeting on in Vitro Culture of Postimplantation Rodent Embryos,
Louvain-la-Neuve, Belgium, 3 to 6 April 1990*

J. J. Picard, Guest Editor

- J.J. Picard** 221 In Vitro Culture of Postimplantation Rodent Embryos
- D.L. Cockroft** 223 Culture Media for Postimplantation Embryos
- S.K.L. Ellington** 229 Use of Embryo Culture to Study Normal Development and
Developmental Mechanisms
- S. Klug** 237 Whole Embryo Culture: Interpretation of Abnormal Development
in Vitro

N.A. Brown D.O. Clarke A. McCarthy	245	Adaptation of Postimplantation Embryos to Culture: Membrane Lipid Synthesis and Response to Valproate
R.J. Kavlock L.A. Oglesby L.L. Hall H.L. Fisher F. Copeland T. Logsdon M. Ebron-McCoy	255	In Vivo and in Vitro Structure-Dosimetry-Activity Relationships of Substituted Phenols in Developmental Toxicity Assays
M.R. Juchau C. Harris K.L. Stark Q.P. Lee H-Y.L. Yang M.J. Namkung A.G. Fantel	259	Cytochrome P450-Dependent Bioactivation of Prodysmorphogens in Cultured Conceptuses
	265	Abstracts
		<i>Book Reviews</i>
A. Lione	273	<i>Cocaine, Marijuana, Designer Drugs: Chemistry, Pharmacology and Behavior</i> edited by K. K. Redda, C. A. Walker, and G. Barnett
D.L. Davis	274	<i>The Recurring Silent Spring</i> by H. Patricia Hynes
	277	Announcement

Volume 5, Number 4

1991

CONTENTS

Editorial

A.R. Scialli	279	Convulsions and Anticonvulsants — How Far Have We Come?
---------------------	-----	---

Reproductive Toxicology Reviews

R.H. Finnell L.V. Dansky	281	Parental Epilepsy, Anticonvulsant Drugs, and Reproductive Outcome: Epidemiologic and Experimental Findings Spanning Three Decades; 1: Animal Studies
L.V. Dansky R.H. Finnell	301	Parental Epilepsy, Anticonvulsant Drugs, and Reproductive Outcome: Epidemiologic and Experimental Findings Spanning Three Decades; 2: Human Studies

Original Contributions

- | | | |
|---|------------|---|
| <p>L.D. Wise
D.H. Minsker
M.A. Cukierski
R.L. Clark
S. Prahalada
J.M. Antonello
J.S. MacDonald
R.T. Robertson</p> | <p>337</p> | <p>Reversible Decreases of Fertility in Male Sprague-Dawley Rats Treated Orally with Finasteride, a 5α-Reductase Inhibitor</p> |
| <p>M.A. Cukierski
J.L. Sina
S. Prahalada
R.T. Robertson</p> | <p>347</p> | <p>Effects of Seminal Vesicle and Coagulating Gland Ablation on Fertility in Rats</p> |
| <p>M.A. Cukierski
J.L. Sina
S. Prahalada
L.D. Wise
J.M. Antonello
J.S. MacDonald
R.T. Robertson</p> | <p>353</p> | <p>Decreased Fertility in Male Rats Administered the 5α-Reductase Inhibitor, Finasteride, Is Due to Deficits in Copulatory Plug Formation</p> |
| <p>K.A. Faber
K. Basham
C.L. Hughes, Jr.</p> | <p>363</p> | <p>The Effect of Neonatal Exposure to DES and <i>O,P'</i>-DDT on Pituitary Responsiveness to GnRH in Adult Castrated Rats</p> |
| <p>N.L. Teaff
R.T. Savoy-Moore</p> | <p>371</p> | <p>Human Granulosa-Luteal Cell Response to Vinblastine Exposure in Vitro</p> |
| <p>B.J. Smith
D.R. Plowchalk
I.G. Sipes
D.R. Mattison</p> | <p>379</p> | <p>Comparison of Random and Serial Sections in Assessment of Ovarian Toxicity</p> |
| <p>J.F. Jarrell
A. McMahon
R.D. Barr
E.V. YoungLai</p> | <p>385</p> | <p>The Agonist (<i>d</i>-leu-6, des-gly-10)-LHRH-Ethylamide Does Not Protect the Fecundity of Rats Exposed to High-Dose Unilateral Ovarian Irradiation</p> |

Short Communication

- | | | |
|-------------------|------------|--|
| <p>G.G. Nahas</p> | <p>389</p> | <p>The First International Symposium on the Physiopathology of Illicit Drugs, Held in Paris, France, on May 31, 1990</p> |
|-------------------|------------|--|

Book Reviews

- | | | |
|---------------------|------------|---|
| <p>A.R. Scialli</p> | <p>391</p> | <p>Updating the Classics:
<i>Goodman and Gilman's The Pharmacologic Basis of Therapeutics</i>, 8th ed., by A.G. Gilman, T.W. Rall, A.S. Nies, and P. Taylor;
<i>Mendelian Inheritance in Man</i>, 9th ed., by V.A. McKusick; and
<i>Langman's Medical Embryology</i>, 6th ed., by T.W. Sadler</p> |
| | <p>393</p> | <p>Letter to the Editor</p> |

CONTENTS

Editorial

- A.R. Scialli** 395 Teratology Information—A New Effort

Original Contributions

- G. Koren** 397 A Multicenter, Prospective Study of Fetal Outcome following
T. Sharav Accidental Carbon Monoxide Poisoning in Pregnancy
A. Pastuszak
L.K. Garrettson
K. Hill
I. Samson
M. Rorem
A. King
J.E. Dolgin
- C.-F. Lau** 405 Embryologic and Cytogenetic Effects of Ethanol on Preimplantation
R. Vogel Mouse Embryos in Vitro
G. Obe
H. Spielmann
- T. Nanbo** 411 Disposition Kinetics in the Rat Fetus
- G. Van Maele-Fabry** 417 Interlaboratory Evaluation of Three Culture Media for
J.J. Picard Postimplantation Rodent Embryos
P. Attenon
P. Berthet
F. Delhaise
M.J.A.P. Govers
P.W.J. Peters
A.H. Piersma
B.P. Schmid
J. Stadler
A. Verhoef
C. Verseil
- V.P. Eroschenko** 427 Ultrastructure of Vagina and Uterus in Young Mice after
Methoxychlor Exposure
- A.W. Rourke** 437 Protein Secretions in Mouse Uterus after Methoxychlor or Estradiol
V.P. Eroschenko Exposure
L.J. Washburn
- R.C. Murthy** 443 Ultrastructural Observations in Testicular Tissue of
D.K. Saxena Chromium-Treated Rats
S.K. Gupta
S.V. Chandra
- V.L. Slott** 449 Rat Sperm Motility Analysis: Methodologic Considerations
J.D. Suarez
S.D. Perreault

Book Reviews

- | | | |
|--------------|-----|--|
| A.R. Scialli | 459 | <p>The Proliferation of Reference Books in Developmental Toxicology:
 <i>Chemically Induced Birth Defects</i> by J.L. Schardein;
 <i>Drugs in Pregnancy and Lactation</i>, 3rd ed., by G.G. Briggs, R.K. Freeman, S. J. Yaffe;
 <i>Teratogens, Chemicals Which Cause Birth Defects</i> edited by V.K. Meyers;
 <i>Drug Safety in Pregnancy</i> by P.I. Folb and M.N. Graham Dukes;
 <i>Drugs and Human Lactation</i> by P.N. Bennett and the WHO Working Group</p> |
| | 462 | Announcement |
| | 463 | Letter to the Editor |
-

Volume 5, Number 6

1991

CONTENTS

Original Contributions

- | | | |
|---|-----|--|
| C. Wegner
H. Nau | 465 | Diurnal Variation of Folate Concentrations in Mouse Embryo and Plasma: The Protective Effect of Folinic Acid on Valproic-Acid-Induced Teratogenicity Is Time Dependent |
| Q.P. Lee
H.-Y.L. Yang
M.J. Namkung
M.R. Juchau | 473 | cAMP-Dependent Regulation of P450-Catalyzed Dealkylation in Rat Conceptal Tissues |
| J.F. Jarrell
L. Bodo
E.V. YoungLai
R.D. Barr
G.J. O'Connell | 481 | The Short-Term Reproductive Toxicity of Cyclophosphamide in the Female Rat |
| G.P. Toth
J.A. Stober
E.L. George
E.J. Read
M.K. Smith | 487 | Sources of Variation in the Computer-Assisted Motion Analysis of Rat Epididymal Sperm |
| S.D. Thomson
R.G. Lendon
I.D. Morris | 497 | Testicular Effects of the Leydig Cell Toxicant Ethane Dimethanesulphonate Given to Neonatal Rats |
| N.J. Chinoy
M.V. Rao
M.V. Narayana
E. Neelakanta | 505 | Microdose Vasal Injection of Sodium Fluoride in the Rat |

D.S. Sheriff	513	Effect of Vanadium on Rat Liver and Testicular Glutathione (GSH) and Lipid Peroxide Levels
J.L. Gubbels	517	Prenatal Diagnosis of Fetal Diastematomyelia in a Pregnancy Exposed to Acyclovir
W.R. Gold		
S. Bauserman		
		<i>Book Reviews</i>
C.F. Colie	521	<i>Cardiac Problems in Pregnancy</i> , 2nd ed., by U. Elkayam and N. Gleicher
A.R. Scialli	521	<i>Effective Expert Witnessing. A Handbook for Technical Professionals</i> by J.V. Matson
	525	Letters to the Editor
	529	Thanks to Our Reviewers
	530	Announcements
	I	Volume 5 List of Contents/Author Index/Key Word Index